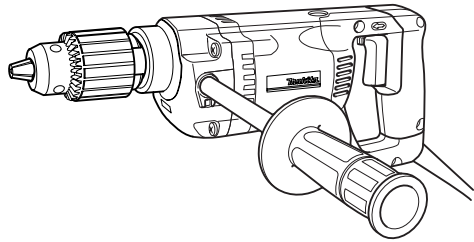




Drill

13 mm (1/2")
MODEL 6304LR



003010



I N S T R U C T I O N M A N U A L

⚠ WARNING:

For your personal safety, READ and UNDERSTAND before using.
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

www.makitatools.com

SPECIFICATIONS

Model		6304LR
Capacities	Steel	13 mm (1/2")
	Wood	38 mm (1-1/2")
No load speed (RPM)		0 - 600/min.
Overall length		358 mm (14-1/8")
Net weight		2.6 kg (5.7 lbs)

- Manufacturer reserves the right to change specifications without notice.
- Specifications may differ from country to country.

GENERAL SAFETY RULES

USA002-2

(For All Tools)

⚠ WARNING:
Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

4. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation □ eliminates the need for the three wire grounded power cord and grounded power supply system.
5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.

-
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
 7. **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
 8. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These cords are rated for outdoor use and reduce the risk of electric shock.

Personal Safety

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
10. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
11. **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
12. **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
13. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
14. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Ordinary eye or sun glasses are NOT eye protection.

Tool Use and Care

15. **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or

against your body is unstable and may lead to loss of control.

16. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
 17. **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
 18. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
 19. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
 20. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
 21. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
 22. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.
- ## SERVICE
23. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
 24. **When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electric shock or injury.

USE PROPER EXTENSION CORD: Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Table 1: Minimum gage for cord

Ampere Rating		Volts	Total length of cord in feet			
		120 V	25 ft.	50 ft.	100 ft.	150 ft.
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

SPECIFIC SAFETY RULES

USB001-2

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to drill safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

1. Hold tool by insulated gripping surfaces when performing an operation where the cutting tools may contact hidden wiring or its own cord. Contact with a “live” wire will make exposed metal parts of the tool “live” and shock the operator.

2. Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.

3. Hold the tool firmly.

4. Keep hands away from rotating parts.

5. Do not leave the tool running. Operate the tool only when hand-held.

6. Do not touch the drill bit or the workpiece immediately after operation; they may be extremely hot and could burn your skin.

7. Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.



SAVE THESE INSTRUCTIONS

⚠ WARNING:
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS

USD201-2

The followings show the symbols used for tool.

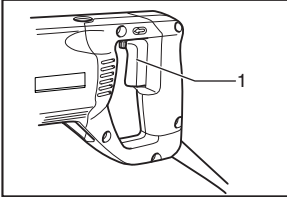
V	volts	n₀	no load speed
A	amperes		Class II Construction
Hz	hertz	.../min	revolutions or reciprocation per minute
	alternating current		

FUNCTIONAL DESCRIPTION

⚠ CAUTION:

- Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

003022



1. Switch trigger

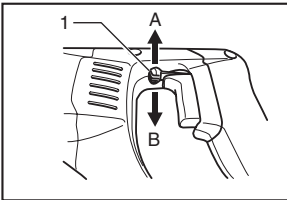
Switch action

⚠ CAUTION:

- Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the “OFF” position when released.

To start the tool, simply pull the switch trigger. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.

003029



1. Reversing switch lever

Reversing switch action

This tool has a reversing switch to change the direction of rotation. Move the reversing switch lever to the A side for clockwise rotation or the B side for counterclockwise rotation.

⚠ CAUTION:

- Always check the direction of rotation before operation.
- Use the reversing switch only after the tool comes to a complete stop. Changing the direction of rotation before the tool stops may damage the tool.

ASSEMBLY

⚠ CAUTION:

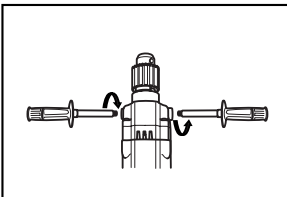
- Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

Installing side grip (auxiliary handle)

⚠ CAUTION:

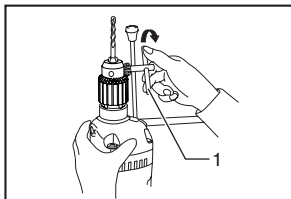
- Always be sure that the side grip is installed securely before operation.

003045



Screw the side grip on the tool barrel securely. The side grip can be installed on either side of the tool, whichever is convenient.

003056



1. Chuck key

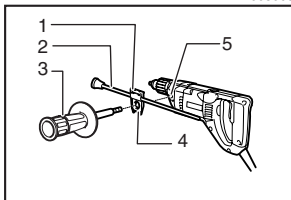
Installing or removing drill bit

To install the bit, place it in the chuck as far as it will go. Tighten the chuck by hand. Place the chuck key in each of the three holes and tighten clockwise. Be sure to tighten all three chuck holes evenly.

To remove the bit, turn the chuck key counterclockwise in just one hole, then loosen the chuck by hand.

After using the chuck key, be sure to return to the original position.

003060



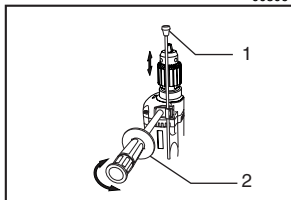
1. Stopper holder
2. Depth gauge
3. Side grip
4. Convex
5. Concave

Depth gauge (optional accessory)

The depth gauge is convenient for drilling holes of uniform depth.

Loosen the side grip and remove it. Fit the convex on the stopper holder to the concave on the tool barrel. Insert the side grip into the stopper holder and screw the side grip.

003061

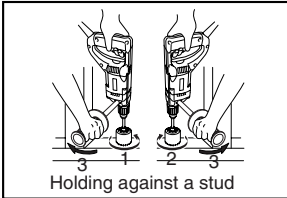


1. Depth gauge
2. Side grip

Insert the depth gauge into the hole in the stopper holder. Adjust the depth gauge to the desired depth and tighten the side grip firmly.

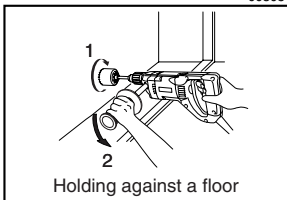
OPERATION

003080



1. Reverse
2. Forward
3. Reaction

003081



1. Forward
2. Reaction

Holding tool

When drilling a large hole with a hole saw, etc., the side grip (auxiliary handle) should be used as a brace to maintain safe control of the tool.

Grasp the rear handle and the front grip firmly when starting or stopping the tool, since there is an initial and final reaction.

When drilling action is forward (clockwise), the tool should be braced to prevent a counterclockwise reaction if the bit should bind. When reversing, brace the tool to prevent a clockwise reaction. If the bit must be removed from a partially drilled hole, be sure the tool is properly braced before reversing.

Drilling operation

Drilling in wood

When drilling in wood, the best results are obtained with wood drills equipped with a guide screw. The guide screw makes drilling easier by pulling the bit into the workpiece.

Drilling in metal

To prevent the bit from slipping when starting a hole, make an indentation with a center-punch and hammer at the point to be drilled. Place the point of the bit in the indentation and start drilling.

Use a cutting lubricant when drilling metals. The exceptions are iron and brass which should be drilled dry.

⚠ CAUTION:

- Pressing excessively on the tool will not speed up the drilling. In fact, this excessive pressure will only serve to damage the tip of your bit, decrease the tool performance and shorten the service life of the tool.

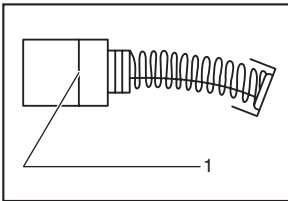
- There is a tremendous twisting force exerted on the tool/bit at the time of hole breakthrough. Hold the tool firmly and exert care when the bit begins to break through the workpiece.
- A stuck bit can be removed simply by setting the reversing switch to reverse rotation in order to back out. However, the tool may back out abruptly if you do not hold it firmly.
- Always secure small workpieces in a vise or similar hold-down device.
- Avoid drilling in material that you suspect contains hidden nails or other things that may cause the bit to bind or break.

MAINTENANCE

CAUTION:

- Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

001145

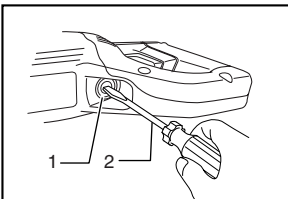


1. Limit mark

Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

003087



1. Brush holder cap
2. Screwdriver

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

ACCESSORIES

CAUTION:

- These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- Drill bits
- Angle attachment
- Chuck key
- Grip assembly (for angle attachment)
- Extension attachment
- Depth guage assembly
- Plastic carrying case



Memo

Lined area for writing the memo.

Memo

[illegible]

Cut



First-Class
Postage
Required

Post Office will
not deliver
without proper
postage.

Makita U.S.A., Inc.
14930 Northam Street
La Mirada, CA 90638-5753



Fold

MAIL THIS PORTION

Your answers to the following questions are appreciated.

1. This product was purchased from:

- ☐ Home Center
- ☐ Hardware/Lumber Store
- ☐ Tool Distributor
- ☐ Industrial Supply
- ☐ Construction Supply
- ☐ Other ()

3. How did you learn about this product:

- ☐ Magazine
- ☐ From Dealer
- ☐ Newspaper
- ☐ Store Display
- ☐ Catalog
- ☐ Radio
- ☐ Exhibition
- ☐ From Friend
- ☐ Previous Usage
- ☐ Other ()

2. Use of the product is intended for:

- ☐ Construction Trade
- ☐ Industrial Maintenance
- ☐ Home Maintenance
- ☐ Hobby
- ☐ Other ()

4. Most favored points are:

- ☐ Design
- ☐ Features
- ☐ Size
- ☐ Price
- ☐ Makita Brand
- ☐ Repair Service
- ☐ Durability
- ☐ Power
- ☐ Other ()

5. Any comments:

DATE PURCHASED												MODEL NO.																			
MONTH				DAY				YEAR				SERIAL NO.																			
<div></div>				<div></div>				<div></div>																							
INTL.												LAST NAME / COMPANY NAME												STATUS				SEX			
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CITY																															
STATE				ZIP CODE								PHONE				AREA CODE															
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AGE:				<div></div> Under 19				<div></div> 20-29				<div></div> 30-39				<div></div> 40-49				<div></div> 50-60				<div></div> Over 60							

BE SURE TO COMPLETE THE CUSTOMER'S PORTION OF THIS FORM AND RETAIN FOR YOUR RECORDS.

Please return this portion by facsimile or mail.

Facsimile No: (714) 522-8133

FACTORY SERVICE CENTERS

1-800-4-MAKITA

RETAIN THIS PORTION FOR YOUR RECORDS

ALABAMA

2365 Pelham Parkway
Pelham, AL 35124
(205) 620-1791

ARIZONA

3707 E. Broadway Rd., Ste. 6
Phoenix, AZ 85040
(602) 442-2850

ARKANSAS

Shackelford Shopping Center
240 South Shackelford Rd.,
Ste. C
Little Rock, AR 72211
(501) 224-5733

CALIFORNIA

41850 Christy St.
Fremont, CA 94538-5107
(510) 657-9881

1421 N. Clovis Ave., Ste. 112
Fresno, CA 93727
(559) 252-5166

14930 Northam St.
La Mirada, CA 90638-5753
(714) 522-9086

1970 Fulton Avenue
Sacramento, CA 95825
(916) 482-5197

1440 South "E" Street
San Bernardino, CA 92408
(909) 885-1289

7674 Clairemont Mesa Blvd.
San Diego, CA 92111
(858) 278-4471

1714 E. McFadden Ave., Unit M
Santa Ana, CA 92705
(714) 667-5066

1565 Winchester B.
Campbell, CA 95008-0501
(408) 379-0377

16735 Satcoy St., Ste. 105
Van Nuys, CA 91406
(818) 782-2440

COLORADO

11839 E. 51st Ave.
Denver, CO 80239-2709
(303) 371-2850

CONNECTICUT

508 Spring St.
Windsor Locks, CT 06096
(860) 292-6405

FLORIDA

620 Douglas Ave. Suite 1302
Altamonte Springs, FL 32714
(407) 774-6000

750 East Sample Road
Pompano Beach, FL 33064
(954) 781-6333

Thompson Center Waters
5501 W. Waters Ave., Ste. 406
Tampa, FL 33634
(813) 886-8292

GEORGIA

4680 River Green Parkway
Duluth, GA 30096-2566
(770) 476-8911

HAWAII

4510 Salt Lake Blvd., Suite A7
Honolulu, HI 96818
(808) 847-0038

ILLINOIS

1450 Feehanville Dr.
Mt. Prospect, IL 60056-6011
(847) 297-3100

INDIANA

8403 Michigan Road, Unit 1
Indianapolis, IN 46268
(317) 334-9980

KANSAS

8819 W. 95th St.
Overland Park, KS 66212
(913) 642-1111

KENTUCKY

1215 S. Hurstbourne Parkway
Louisville, KY 40222
(502) 326-3740

LOUISIANA

5626 Jefferson Hwy.
Harahan, LA 70123
(504) 733-4138

MARYLAND

7541 - 45 Ritchie Highway
Glen Burnie, MD 21061
(410) 590-0160

MASSACHUSETTS

232 Providence Hwy.
Westwood, MA 02090
(617) 461-9754

MICHIGAN

37454 Ann Arbor Trail
Livonia, MI 48150
(313) 432-1012

MINNESOTA

6427 Penn Ave. South
Richfield, MN 55423
(612) 869-5199

MISSOURI

9876 Watson Road
St. Louis, MO 63126-2221
(314) 909-9889

NEBRASKA

4129 S. 84th St.
Omaha, NE 68127
(402) 597-2925

NEVADA

3375 S. Decatur Blvd.
Las Vegas, NV 89102
(702) 368-4277

NEW JERSEY

251 Herrod Blvd.
Dayton, NJ 08810-1539
(609) 655-1212

NEW MEXICO

5805 Menaul Blvd. NE
Albuquerque, NM 87110
(505) 881-4619

NEW YORK

4917 Genesee Street
Cheektowaga, NY 14225
(716) 685-9503

131-35 31st Ave.
Flushing, NY 11354
(718) 886-0971

NORTH CAROLINA

3501-G S. Tryon St.
Charlotte, NC 28217
(704) 527-0611

OHIO

6253 E. Main St.
Columbus, OH 43213
(614) 860-0222

6379 Pearl Road
Parma Heights, OH 44130
(440) 843-7555

1617 E. Kemper Rd.
Sharonville, OH 45246
(513) 771-0788

OKLAHOMA

552 E. Memorial Road
Oklahoma City, OK 73114
(405) 752-2655

OREGON

828 18th Avenue, N.W.
Portland, OR 97209
(503) 222-1823

PENNSYLVANIA

Springwater Plaza
364 Wilmington W. Chester
Pike
Glen Mills, PA 19342
(610) 459-4122

6200 Babcock Blvd
Pittsburgh, PA 15237
(412) 366-6363

PUERTO RICO

200 Guayama St.
Hato Rey, PR 00917
(787) 250-8776

TENNESSEE

4655 Nolensville Rd.
Nashville, TN 37211
(615) 331-9922

TEXAS

12801 Stemmons Fwy Ste. 809
Farmers Branch, TX 75234
(972) 243-1150

12701 Directors Dr.
Stafford, TX 77477-3701
(281) 955-8665

3453 IH-35 North, Ste. 101
San Antonio, TX 78219
(210) 228-0676

UTAH

145 E. 1300 S., Ste. 101
Salt Lake City, UT 84115
(801) 359-3410

VIRGINIA

5760 Northampton Blvd., Ste.
102
Virginia Beach, VA 23455
(757) 460-0280

WASHINGTON

22220 84th Ave. So., Bldg. A
Kent, WA 98032
(253) 395-8055

WISCONSIN

Lincoln Plaza Shopping Ctr.
2245 S. 108th St. West Allis, WI
53227
(414) 541-4776

CUSTOMER'S RECORD

When you need service: Send complete tool (prepaid) to one of the Makita Factory Service Centers listed, or to an Authorized Makita Service Center. Be sure to attach a letter to the outside of the carton detailing the problem with your tool.	Date Purchased
	Dealer's Name & Address
	Model No.
	Serial No.

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

MAKITA LIMITED ONE YEAR WARRANTY

Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- the tool has been abused, misused or improperly maintained:
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Makita Corporation

3-11-8, Sumiyoshi-cho,
Anjo, Aichi 446-8502 Japan